

## ABSTRACT OF THE DISCLOSURE

Reliable Cu interconnects are formed by filling an opening in a dielectric layer with Cu and then laser thermal annealing in  $\text{NH}_3$  to reduce copper oxide and to reflow the deposited Cu, thereby eliminating voids and reducing contact resistance. Embodiments include laser thermal annealing employing an  $\text{NH}_3$  flow rate of about 200 to about 2,000 sccn.

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